

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph at page 34, lines 12-14 to read as follows:

Proposition 6.1. *For any real $n \times n$ matrix A of determinant ± 1 , there is a bijection $\psi: AZ^n \rightarrow Z^n$ which is optimal in the sense that $\sup_{x \in AZ^n} \|\psi x - x\|$ is minimal over all such bijections.*

Please amend the paragraph at page 45, lines 11-18 to read as follows:

A number of the calculations presented earlier can be applied without change in the present context, given suitable definitions. In particular, we define the norm $\|A\|$ of a signal transformation A (or the norm $\|A(z)\|$ of its associated z -transform matrix) to be the supremum of $\|Ax\|/\|x\|$ over all nonzero bounded inputs x (where $\|x\|$ is defined as in the preceding section). Then, if $A = A_1 A_2 \cdots A_k$ where each A_i can be approximated by an integer mapping ϕ_i with error bound C_i , then A can be approximated by the composition of these integer mappings with error bound

$$(9.1) \quad C_1 + \|A_1\| C_2 + \|A_1\| \|A_2\| C_3 + \cdots + \|A_1\| \|A_2\| \cdots \|A_{k-1}\| C_k.$$